

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 19365-095930	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, Item 5 below.
International application No. PCT/US2004/002244	International filing date (day/month/year) 26/01/2004	(Earliest) Priority Date (day/month/year) 24/01/2003	
Applicant INTIER AUTOMOTIVE CLOSURES INC.			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the title.

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings.

a. the figure of the drawings to be published with the abstract is Figure No. 4

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)".

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/002244

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A recliner assembly is disclosed for providing selective pivotal adjustment of a seat back (14) relative to a seat cushion (12). The recliner assembly includes

a fixed plate (30) fixedly secured to the seat cushion and a mobile plate (30) fixedly secured to the seat back. The mobile plate is fixedly secured to the fixed plate. The mobile plate includes an annular rim having a plurality of teeth (62). A pawl (40) is slidably supported between the fixed and mobile plates for movement in and out of locking engagement with the plurality of teeth. A cam (70) is fixedly secured to a shaft (60) rotatably journaled through an aperture (36) formed in the mobile plate. The aperture is oversized relative to the shaft to allow the shaft and the cam to float radially relative to the pawl to help prevent binding of the pawl during movement in and out of locking engagement with the plurality of teeth.

INTERNATIONAL SEARCH REPORT

International Application No

PC 2004/002244

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B60N2/235

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 024 410 A (YOSHIDA TOMONORI) 15 February 2000 (2000-02-15)	1,2,4, 11-22, 24,27-29
Y	column 7, line 36 - line 49; figures 1,2	3,5-7
Y	US 6 142 569 A (SASAKI AKIRA ET AL) 7 November 2000 (2000-11-07)	3
A	figures 1,2	1
Y	US 6 364 413 B1 (LECONTE S EACUTE BASTIEN ET AL) 2 April 2002 (2002-04-02)	5-7
A	column 5, line 8 - line 18; figure 4	1
X	US 6 092 874 A (KOJIMA YASUHIRO ET AL) 25 July 2000 (2000-07-25)	1,20,29
	column 3, line 49 - line 58; figure 5	
	----- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *S* document member of the same patent family

Date of the actual completion of the international search

1 July 2004

Date of mailing of the international search report

13/07/2004

Name and mailing address of the ISA

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Pétiaud, A

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/JP2004/002244

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 622 407 A (YAMADA YUKIFUMI ET AL) 22 April 1997 (1997-04-22) column 3, line 8 - line 14; figure 3 -----	1, 20, 29
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 08, 29 September 1995 (1995-09-29) & JP 7 136032 A (AISIN SEIKI CO LTD), 30 May 1995 (1995-05-30) abstract -----	1, 20, 29
A	EP 1 195 115 A (NHK SPRING CO LTD) 10 April 2002 (2002-04-10) figure 16 -----	1, 3, 20, 29

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-19

Recliner assembly with self-adjusting rack of teeth

2. claims: 20-28

Recliner assembly including a cam with axially extending pin

3. claim: 29

Reclined assembly with a fixed plate including wedge
surfaces

INTERNATIONAL SEARCH REPORT

International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP04/002244

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6024410	A	15-02-2000	JP 11046914 A	23-02-1999
US 6142569	A	07-11-2000	JP 10286139 A	27-10-1998
			EP 0858927 A2	19-08-1998
US 6364413	B1	02-04-2002	FR 2792583 A1	27-10-2000
			DE 10017851 A1	19-04-2001
			JP 3434779 B2	11-08-2003
			JP 2000316659 A	21-11-2000
US 6092874	A	25-07-2000	JP 11155671 A	15-06-1999
			DE 19855499 A1	24-06-1999
			FR 2771687 A1	04-06-1999
US 5622407	A	22-04-1997	JP 3477768 B2	10-12-2003
			JP 7136032 A	30-05-1995
			JP 7255551 A	09-10-1995
			DE 4441159 A1	24-05-1995
			GB 2284753 A ,B	21-06-1995
JP 7136032	A	30-05-1995	JP 3477768 B2	10-12-2003
			DE 4441159 A1	24-05-1995
			GB 2284753 A ,B	21-06-1995
			US 5622407 A	22-04-1997
EP 1195115	A	10-04-2002	JP 2001000265 A	09-01-2001
			JP 2001061583 A	13-03-2001
			JP 2001087069 A	03-04-2001
			JP 2001087073 A	03-04-2001
			EP 1195115 A1	10-04-2002
			WO 0076374 A1	21-12-2000